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EXAMINER

HUR, ECE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/574,123

Applicant(s)

AALTONEN, ANTTI

Examiner

ECE HUR

Art Unit

2109

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 03/31/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

This action is responsive to application filed on March 31, 2005 in which claims 1 to 22 are presented for examination. This application is a national stage entry of PCT/FI04/50140 and it is claiming foreign priority for application 20031433, filed 10/03/2003, in France.

Status of Claims

Claims 1-22 are pending in the case. Claims 1, 8, 12, 17, 21 and 22 are the independent claims.

Claim 21 is rejected under 35 U.S.C. 101.

Claims 1-5, 7-15, 17-22 are rejected under 35 U.S.C. 102(b).

Claims 6 and 16 are rejected under 35 U.S.C. 103(a).

Information Disclosure Statement Acknowledgement

The information disclosure statement filed on March 31, 2005 is in compliance with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609. It has been placed in the application file, the information referred to therein has been considered as to the merits.

Priority Acknowledgement

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). Receipt is acknowledged of certified copy of France Patent Application No.2003-1433, filed on October 3, 2003 submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Regarding Claim 21, Claim 21 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter and claiming "Software" per se. Software is functional descriptive material that can be considered statutory only if it is both functional and clearly embodied on a computer readable medium and designed to support specific data manipulation function. When functional descriptive material is recorded on a computer-readable medium it will become structurally and functionally interrelated the medium and will be statutory in most cases since the use of technology permits the function of the descriptive material to be realized. See *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031, 1035 (Fed. Cir 1994) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQd at 1759. A Software structure is functional if the specific arrangement of data enables a computer to accomplish useful result arising from the arrangement of the data in the software. However, only computer readable medium executed instruction by a processor could be statutory, it is not clearly defined as being embodied in a computer readable medium as executed instruction and is therefore not statutory. See *Warmerdam*, 33 F.3d at 1360, 31 USPQ2d at 1759.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7-15, 17-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Driskell, US 6,239,803.

Regarding Claim 1, Driskell discloses a method to achieve least effort selection from an item list of arbitrary length as a technique to determine the number of items in a list to display the most appropriate number of items per page. Then it selects from eight possible central area configurations the one that permits the user to display any desired page with the fewest average number of mouse or keystrokes. Driskell discloses the claimed aspect of a method of forming a menu on a display of an electronic device, which menu comprises at least two function elements for selecting functions. More specifically, Driskell discloses the claimed aspect of defining at least three display areas that are substantially adjacent to each other in a first direction in FIG. 1A, wherein an icon A, 1A08, Label #1, Icon D and Label #7 are displayed.

Driskell discloses the claimed aspect of defining at least a first identification part and a second identification part that are contained in each function element of the at least two function elements in FIG. 1, wherein Label #1 defines Icon A and Label #7 defines Icon D.

Driskell discloses the claimed aspect of displaying the first identification part of the at least two function elements in said first direction on outermost display areas, displaying the second identification part of the at least two function elements on at least one display area between said outermost display areas in such a manner that a second identification part of a first function element and a second identification part of a second function element are positioned at least substantially next to each other in a second direction substantially perpendicular to said first direction in FIGURE 1A, wherein Icon A is on most outermost display area and next to Label #1 and perpendicular to first direction.

Regarding Claim 2, most of the limitations have been met in the rejection of Claim 1. See the rejection of Claim 1 for details. Driskell discloses the claimed aspect of dimensions of the first identification part of the function element in the second direction are substantially larger than dimensions of the second identification part of the function element in said second direction in FIGURE 3A00, wherein $i\text{IconHeight}$ is given large than the $i\text{LabelHeight}$.

Regarding Claim 3, most of the limitations have been met in the rejection of Claim 2. See the rejection of Claim 2 for details. Driskell discloses the claimed aspect of a size of the first identification part in the second direction is twice a size of the second identification part in said second direction in FIGURE 3A00, wherein $i\text{LabelHeight}=8$ and $i\text{IconHeight}=16$.

Regarding Claim 4, most of the limitations have been met in the rejection of Claim 1. See the rejection of Claim 1 for details. Driskell discloses the claimed aspect of first identification part is an image and the second identification part is a label in FIGURE 1A, wherein first identification part is an icon A and second identification part is Label #1.

Regarding Claim 5, most of the limitations have been met in the rejection of Claim 1. See the rejection of Claim 1 for details. Driskell discloses the claimed aspect of at least one function element is connected to at least one of the functions of the device, wherein a plurality of list item target areas that include active rectangular areas responsive to pointing device selection. (Driskell, Page 7, Paragraph 55).

Regarding Claim 7, most of the limitations have been met in the rejection of Claim 1. See the rejection of Claim 1 for details. Driskell discloses the claimed aspect of navigation between the first function element and the second function element is conducted in the second direction in FIGURE 1A.

Regarding Claim 8, Driskell discloses the claimed aspect a graphic user interface of an electronic device for presenting various menus, Driskell discloses the claimed aspect of a graphical user interface of presenting various menus on a display of an electronic device, which menu comprises at least two function elements for selecting functions. More specifically, Driskell discloses the claimed

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aspect of defining at least three display areas that are substantially adjacent to each other in a first direction in FIG. 1A, wherein an icon A, 1A08, Label #1, Icon D and Label #7 are displayed.

Driskell discloses the claimed aspect of defining at least a first identification part and a second identification part that are contained in each function element of the at least two function elements in FIG. 1, wherein Label #1 defines Icon A and Label #7 defines Icon D.

Driskell discloses the claimed aspect of displaying the first identification part of the at least two function elements in said first direction on outermost display areas, displaying the second identification part of the at least two function elements on at least one display area between said outermost display areas in such a manner that a second identification part of a first function element and a second identification part of a second function element are positioned at least substantially next to each other in a second direction substantially perpendicular to said first direction in FIGURE 1A, wherein Icon A is on most outermost display area and next to Label #1 and perpendicular to first direction.

Regarding Claim 9, most of the limitations have been met in the rejection of Claim 8. See the rejection of Claim 8 for details. Driskell discloses the claimed aspect of dimensions of the first identification part of the function element in the second direction are substantially larger than dimensions of the second identification part of the function element in said second direction in FIGURE 3A00, wherein $i\text{iconHeight}$ is given large than the $i\text{LabelHeight}$.

Regarding Claim 10, most of the limitations have been met in the rejection of Claim 8. See the rejection of Claim 8 for details. Driskell discloses the claimed aspect of a size of the first identification part in the second direction is twice a size of the second identification part in said second direction in FIGURE 3A00, wherein $iLabelHeight=8$ and $iIconHeight=16$.

Regarding Claim 11, most of the limitations have been met in the rejection of Claim 8. See the rejection of Claim 8 for details. Driskell discloses the claimed aspect of first identification part is an image and the second identification part is a label in FIGURE 1A, wherein first identification part is an icon A and second identification part is Label #1.

Regarding Claim 12, the method and system disclosed by Driskell could be used to achieve a device. Driskell discloses a method to achieve least effort selection from an item list of arbitrary length as a technique to determine the number of items in a list to display the most appropriate number of items per page. Then it selects from eight possible central area configurations the one that permits the user to display any desired page with the fewest average number of mouse or keystrokes. Driskell discloses the claimed aspect of a method of forming a menu on a display of an electronic device, which menu comprises at least two function elements for selecting functions. More specifically, Driskell discloses the claimed aspect of defining at least three display areas that are

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substantially adjacent to each other in a first direction in FIG. 1A, wherein an icon A, 1A08, Label #1, Icon D and Label #7 are displayed.

Driskell discloses the claimed aspect of defining at least a first identification part and a second identification part that are contained in each function element of the at least two function elements in FIG. 1, wherein Label #1 defines Icon A and Label #7 defines Icon D.

Driskell discloses the claimed aspect of displaying the first identification part of the at least two function elements in said first direction on outermost display areas, displaying the second identification part of the at least two function elements on at least one display area between said outermost display areas in such a manner that a second identification part of a first function element and a second identification part of a second function element are positioned at least substantially next to each other in a second direction substantially perpendicular to said first direction in FIGURE 1A, wherein Icon A is on most outermost display area and next to Label #1 and perpendicular to first direction.

Regarding Claim 13, most of the limitations have been met in the rejection of Claim 12. See the rejection of Claim 12 for details. Driskell discloses the claimed aspect of dimensions of the first identification part of the function element in the second direction are substantially larger than dimensions of the second identification part of the function element in said second direction in FIGURE 3A00, wherein $i\text{iconHeight}$ is given large than the $i\text{LabelHeight}$.

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Regarding Claim 14, most of the limitations have been met in the rejection of Claim 12. See the rejection of Claim 12 for details. Driskell discloses the claimed aspect of a size of the first identification part in the second direction is twice a size of the second identification part in said second direction in FIGURE 3A00, wherein $iLabelHeight=8$ and $iIconHeight=16$.

Regarding Claim 15, most of the limitations have been met in the rejection of Claim 12. See the rejection of Claim 12 for details. Driskell discloses the claimed aspect of first identification part is an image and the second identification part is a label in FIGURE 1A, wherein first identification part is an icon A and second identification part is Label #1.

Regarding Claim 17, Driskell discloses a system comprising a display unit with a graphic user interface for presenting various menus. Driskell discloses the claimed aspect of a system of forming a menu on a display of an electronic device, which menu comprises at least two function elements for selecting functions. More specifically, Driskell discloses the claimed aspect of defining at least three display areas that are substantially adjacent to each other in a first direction in FIGURE 1A, wherein an icon A, 1A08, Label #1, Icon D and Label #7 are displayed.

Driskell discloses the claimed aspect of defining at least a first identification part and a second identification part that are contained in each function element

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of the at least two function elements in FIG. 1, wherein Label #1 defines Icon A and Label #7 defines Icon D.

Driskell discloses the claimed aspect of displaying the first identification part of the at least two function elements in said first direction on outermost display areas, displaying the second identification part of the at least two function elements on at least one display area between said outermost display areas in such a manner that a second identification part of a first function element and a second identification part of a second function element are positioned at least substantially next to each other in a second direction substantially perpendicular to said first direction in FIGURE 1A, wherein Icon A is on most outermost display area and next to Label #1 and perpendicular to first direction.

Regarding Claim 18, most of the limitations have been met in the rejection of Claim 17. See the rejection of Claim 17 for details. Driskell discloses the claimed aspect of dimensions of the first identification part of the function element in the second direction are substantially larger than dimensions of the second identification part of the function element in said second direction in FIGURE 3A00, wherein *ilconHeight* is given large than the *iLabelHeighth*.

Regarding Claim 19, most of the limitations have been met in the rejection of Claim 17. See the rejection of Claim 17 for details. . Driskell discloses the claimed aspect of a size of the first identification part in the second direction is

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twice a size of the second identification part in said second direction in FIGURE 3A00, wherein iLabelHeight=8 and ilconHeight=16.

Regarding Claims 20, most of the limitations have been met in the rejection of Claim 17. See the rejection of Claim 17 for details. Driskell discloses the claimed aspect of first identification part is an image and the second identification part is a label in FIGURE 1A, wherein first identification part is an icon A and second identification part is Label #1.

Regarding Claim 21, Driskell discloses the claimed aspect of a software program of displaying a menu on a display of an electronic device, the program stored on a computer readable medium comprising a number of instructions for performing the steps in FIGURES 5A-8M, wherein software sections are illustrated. Specifically, Driskell discloses the claimed aspect of defining at least three display areas that are substantially adjacent to each other in a first direction in FIG. 1A, wherein an icon A, 1A08, Label #1, Icon D and Label #7 are displayed.

Driskell discloses the claimed aspect of defining at least a first identification part and a second identification part that are contained in each function element of the at least two function elements in FIGURE 1A, wherein Label #1 defines Icon A and Label #7 defines Icon D.

Driskell discloses the claimed aspect of displaying the first identification part of the at least two function elements in said first direction on outermost display

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areas, displaying the second identification part of the at least two function elements on at least one display area between said outermost display areas in such a manner that a second identification part of a first function element and a second identification part of a second function element are positioned at least substantially next to each other in a second direction substantially perpendicular to said first direction in FIGURE 1A, wherein Icon A is on most outermost display area and next to Label #1 and perpendicular to first direction.

Regarding Claim 22, Driskell and Twerdahl are teaching the claimed aspect of a storage medium readable by a computer, inherently, because they teach the aspect of said medium containing information stored therein for performing the steps. More specifically, Driskell discloses the claimed aspect of defining at least three display areas that are substantially adjacent to each other in a first direction in FIGURE 1A, wherein an icon A, 1A08, Label #1, Icon D and Label #7 are displayed.

Driskell discloses the claimed aspect of defining at least a first identification part and a second identification part that are contained in each function element of the at least two function elements in FIGURE 1A, wherein Label #1 defines Icon A and Label #7 defines Icon D.

Driskell discloses the claimed aspect of displaying the first identification part of the at least two function elements in said first direction on outermost display areas, displaying the second identification part of the at least two function elements on at least one display area between said outermost display areas in

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such a manner that a second identification part of a first function element and a second identification part of a second function element are positioned at least substantially next to each other in a second direction substantially perpendicular to said first direction in FIGURE 1A, wherein Icon A is on most outermost display area and next to Label #1 and perpendicular to first direction.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Driskell, US 6,239,803 in view of Twerdahl et al. US Pub.: 2004/0221243 A1.

Regarding Claim 6, most of the limitations have been met in the rejection of Claim 5. See the rejection of Claim 5 for details. Driskell does not teach the claimed aspect of a function, at least two function elements is a phone number directory, an image manager, a phone manager, a message manager or an electronic organizer. However, Twerdahl discloses the claimed aspect of function

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element being "Address", 318 could be define as a phone manager, "SMS", 308 could be defined as message manager in FIG. 2 and in FIG. 2 "Multimedia", 210 could be defined as an image manager. It would be obvious to one of ordinary skill in the art at the time of the invention to add Twerdahl's element function on Driskell's invention, because it will allow the users on small screen devices such as cell phone or PDA to view multiple element functions.

Regarding Claim 16, most of the limitations have been met in the rejection of Claim 12. See the rejection of Claim 12 for details. Driskell does not teach the claimed aspect of a function, at least two function elements is a phone number directory, an image manager, a phone manager, a message manager or an electronic organizer. However, Twerdahl discloses the claimed aspect of function element being "Address", 318 could be define as a phone manager, "SMS", 308 could be defined as message manager in FIG. 2 and in FIG. 2 "Multimedia", 210 could be defined as an image manager. It would be obvious to one of ordinary skill in the art at the time of the invention to add Twerdahl's element function on Driskell's invention, because it will allow the users on small screen devices such as cell phone or PDA to view multiple element functions.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- 1) Edo et al., US 6,133,905, 10/17/2000, "Input apparatus and input method".
- 2) Fong et al., US 6,188,406, 02/13/2001, "Single-item text window for scrolling lists".
- 3) Yamaguchi, Kosuke, et al., US 20040155907, 08/12/2004, "Icon display system and method, electronic appliance, and computer program".
- 4) Nakanishi, Tomoaki, US 20040229657 A1, 07/12/2001, "Mobile communication terminal apparatus and recording medium which records data operation process program".
- 5) Bells, Matthew et al., US 20050050474, 03/03/2005, "Method and data structure for user interface customization".
- 6) Vaananen, Johannes et al., US 2005/0076303, 04/07/2005, "Graphical user interface and method and electronic device for navigating in the graphical user interface".
- 7) Salt; Bryan David; et al. et al., US 20060107232, 05/18/2006, "User interface".
- 8) Anwar Majid et al., US 20060123360, 06/08/2006, "User interfaces for data processing devices and systems".
- 9) Son Yong Tae et al., US 20070113204, 05/17/2007, "Method of displaying menus in mobile telephone".

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to ECE HUR whose telephone number is (571) 270-1972. The examiner can normally be reached on MONDAY-THURSDAY 7:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, FRANTZ COBY can be reached on (571) 272-4017. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ece Hur
E.H./e.h.

August 07, 2007


FRANTZ COBY
SUPERVISORY PATENT EXAMINER